



## **A Delphi Study to Identify Research Priorities for the Therapy Professions in Northern Ireland - Executive Summary Report**

McDonough, S., McKenna, H., Keeney, S., Hasson, F., Ward, M., Kelly, G., Lagan, K., & Duffy, O. (2011). *A Delphi Study to Identify Research Priorities for the Therapy Professions in Northern Ireland - Executive Summary Report*. Ulster University.  
[https://www.publichealth.hscni.net/sites/default/files/NI\\_Delphi\\_Study\\_Executive\\_Summary.pdf](https://www.publichealth.hscni.net/sites/default/files/NI_Delphi_Study_Executive_Summary.pdf)

[Link to publication record in Ulster University Research Portal](#)

### **Publication Status:**

Published (in print/issue): 01/05/2011

### **Document Version**

Publisher's PDF, also known as Version of record

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**A DELPHI STUDY TO IDENTIFY RESEARCH PRIORITIES FOR THE  
THERAPY PROFESSIONS IN NORTHERN IRELAND**

**Summary Report**

**Funded by the HSC Public Health Agency Research and Development Division,  
Northern Ireland and the Health Research Board, Ireland**

**Research undertaken by the University of Ulster**

**May 2011**



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## **Acknowledgements**

Thank you to all the Delphi expert panel members for giving up their time to provide their expert opinion throughout all the rounds of the Delphi technique.

Thank you to all the Research Advisory Group and Steering Group members who provided extensive support and advice throughout the study.

The HSC R&D Division, members of the steering group and the research team wish to pay a special tribute to Mrs Patricia Blackburn, Lead AHP Officer and Chair of the steering group, who sadly passed away during the completion of this work.

In her role as Lead Officer for AHPs in the DHSSPS, Patricia endorsed this research programme and provided a letter of support to be sent to Trust AHP managers to champion staff participation in this study. Patricia took every opportunity to encourage and develop research activity within the AHP family, and in her role as Chair of the steering committee she was keen to see this research study completed successfully.

Many of the priorities identified in this study resonate with Patricia's goals of encouraging the ongoing development of the role of AHPs in the delivery of modern and evidence based health and social care services. Patricia's input to this research project will always be highly valued and special.

Patricia's death was a huge loss to the AHP community in Northern Ireland and she is sadly missed by her former colleagues.

## Introduction

In Northern Ireland (NI) the therapy professions include Chiropody/Podiatry, Dietetics, Occupational Therapy, Orthoptics, Physiotherapy and Speech and Language Therapy and constitute a significant and growing proportion of the healthcare workforce throughout the United Kingdom (UK). Allied Health Professionals (AHP) (originally referred to as Professions Allied to Medicine (PAM) in NI) have an important role in the planning, organisation and delivery of health care across most sectors of health care within both acute services and primary health and social care where they also contribute to assisting individuals with long term conditions to maximise their potential and independence. These roles are important in maintaining the quality of health care provision within changing, multidisciplinary and increasingly technological health and social care delivery systems.

## Aim of the study

The overall aim of this study was to identify research priorities for the therapy professions in NI through the application of the Delphi technique. A comprehensive policy review and exploration of research literature demonstrated that there is a shortage of research within therapy professions in NI (see main report at <http://www.publichealth.hscni.net/publications/delphi-study-identify-research-priorities-therapy-professions-northern-ireland>).

## The Delphi technique

The Delphi technique is a structured process, which uses a series of questionnaires (known as 'rounds') to gather information. This process continues until consensus has been reached (McKenna & Keeney, 2008; Keeney *et al.* 2006). Originally developed by the RAND Corporation, the technique was named after the Greek Oracle at Delphi. Since its inception the Delphi technique has evolved into a number of modifications. Each type of Delphi has one of two aims – to either gain consensus on an issue or to identify priorities – but can differ in the process used to reach these aims. Three members of the research team have published and presented internationally on this methodological approach over a period of twenty five years (McKenna, Keeney and Hasson). Full details of the methodology can be found in the main report at <http://www.publichealth.hscni.net/publications/delphi-study-identify-research-priorities-therapy-professions-northern-ireland>).

## **The study**

The overall aim of this study was to identify research priorities for the therapy professions in Northern Ireland through the application of the Delphi technique. These priorities span from broad areas for research to more profession-specific topics. Results apply to a combination of the wide, general field of therapy professions, key stakeholders and service users, as well as each professional group (physiotherapy, occupational therapy, speech and language therapy, clinical nutrition and dietetics, podiatry and orthoptics) including academic, managerial and clinical practitioner perspectives.

## **Methodology**

A three round classical Delphi technique (McKenna, 1994) was used to identify research priorities for the therapy professions from expert panels recruited across N I. Therefore, this was a large multi-panelled three round Delphi study including experts from six different professional areas and two further areas representing the perspectives of key stakeholders and service users. There were a total of six professional expert panels which included both clinical and academic staff. Each panel member met the appropriate inclusion criteria. The full Delphi sample totalled 180 expert panel members. The overall (average) response rate to the Delphi was 73%.

Round one of the Delphi was content analysed for themes. Results were used to inform the Round 2 questionnaire. Analysis of Rounds 2 and 3 included summary statistics being computed on the data to determine statements that had reached consensus and statistics for feedback to the panel.

## **Findings**

### **Comparative overview of panel outcomes**

Once the research priorities from the discipline-specific panels, the service user panel and the key stakeholder panel were triangulated, a number of significant themes (which could be recommended as key research priorities) emerged. From the analysis of the findings and the identification of themes across the different therapy professions most of these can be categorised into seven major areas:

- (1) practice evaluation;
- (2) health promotion;
- (3) service organisation;
- (4) clinical academic training;
- (5) service user perspective;

- (6) cost-effectiveness of services;
- (7) epidemiology.

A full discussion of these areas is included in the main research report which can be viewed at <http://www.publichealth.hscni.net/publications/delphi-study-identify-research-priorities-therapy-professions-northern-ireland>. Appendix 1 summarises the rankings under each of these themes and provides details of the key areas of practice, the main techniques/interventions and issues around service organisation that were prioritised by each expert panel. This also indicates the ranking for the top research priority items for each panel across a range of topics.

## **General Recommendations**

### **Practice evaluation**

**Recommendation 1:** Research should be undertaken into the evaluation of clinical practice from a multidisciplinary perspective in the following topics: mental health, cancer, obesity; diabetes; chronic disease management (especially stroke and brain injury).

### **Health promotion, disease prevention and patient education**

**Recommendation 2:** Multidisciplinary research programmes are required to investigate the following: the role of each AHP in health promotion and disease prevention; and how to optimise cross disciplinary working in this area.

### **Service organisation**

**Recommendation 3:** In order to support research projects and programmes focused on service delivery and organisation, mechanisms should be considered for supporting research in these areas.

**Recommendation 4:** Key stakeholders should collaborate with the therapy professions to research how best to deliver regional provision of specialist teams.

### **Clinical academic career**

**Recommendation 5:** Explore how to build on the funding opportunities available via the HSC Public Health Agency R&D Division in order to further develop clinical academic training across all members of the therapy professions.

### **Service user perspective**

**Recommendation 6:** All research should include service users and their carers' as partners in research plans, processes and outputs in order to capture their perceptions and views of



AHP services, (see Strategy for personal and public involvement in Health and Social Care research, 2010).

### Cost-effectiveness

**Recommendation 7:** Research should be undertaken into the cost-effectiveness of specific therapy treatments and/or models of service delivery.

## Specific Findings and Recommendations

Some specific recommendations emanating from the research priorities identified by individual therapy professions can also be made. The findings for each profession are outlined and the specific recommendations below each table.

### Physiotherapy

**Table 4: Top Twenty Research Priorities identified by Physiotherapy Panel**

Research Priority	Rank	Timeframe
An exploration of the factors associated with adherence to exercise and physical fitness programmes.	1	Short/Medium
An examination of the role of exercise in improving mental health of mild/moderate depression.	2	Medium
An investigation into how exercise capabilities should be assessed dependent on disease state including the identification of an exercise prescription.	3 joint	Medium
An exploration of the impact of the pressure of targets, waiting lists and the volume of repeat referrals on achieving intervention outcomes that reflect the needs and expectations of patients.	3 joint	Short
Identification of optimal duration and intensity of treatment and engagement with patients linked to outcomes.	5	Short/Medium /Long
Cost benefit analysis of the provision of services.	6	Short/Medium
More effective incorporation of health economics within future research design.	7	Medium
To research the benefits of physiotherapy intervention in promoting an enablement ethos with chronic conditions	8	Medium
An exploration of the relationship between skill mix and clinical outcomes.	9	Long
Identification of areas for development in the structure of how therapy is provided – self-management in adults, parent-led therapy in children, and group therapy versus one-to-one approaches.	9	Short/Medium

Research designed to assess the impact of physical activity on health and wellbeing.	<b>11</b>	Medium
The effectiveness of exercise interventions in lymphoedema management.	<b>12</b>	Long
Assessing the effectiveness of treatments in the management of chronic pain including exercise, acupuncture, education, hypnosis and biopsychosocial approaches.	<b>13 joint</b>	Medium
An assessment of the effectiveness of interventions in the management of back pain including traction, manual therapy and core stability strategies.	<b>13 joint</b>	Medium
Contrasting the clinical effectiveness of the use of classes with one to one treatment approaches.	<b>13 joint</b>	Medium
An investigation into the benefits of exercise based rehabilitation of soft tissue injury.	<b>16 joint</b>	Medium
Evaluation of the role of exercise in cancer rehabilitation. – intensify/frequency etc.	<b>16 joint</b>	Medium
Research into the use of functional tests in assessment.	<b>16 joint</b>	Long
An exploration of optimal assessment and treatment times for physiotherapy appointments – do longer appointment times result in better long term outcomes?	<b>16 joint</b>	Long
The impact of exercise intensity on symptom management and recovery in long term conditions.	<b>20</b>	Long
The effectiveness of individualised development care for preterm infants born at less than 32 weeks gestation.	<b>20</b>	Long

**Recommendation 8:** Clinical studies are needed to investigate how to prescribe, measure adherence and evaluate the optimum exercise approach in the management of long-term conditions (including painful musculoskeletal and soft tissue injuries).

**Recommendation 9:** Evaluate less conventional techniques/approaches such as hypnosis, self management, acupuncture and CBT.

**Recommendation 10:** Explore the role of physiotherapy in areas such as mental health and cancer rehabilitation.

**Recommendation 11:** Investigations around resources and the capacity of physiotherapy to accommodate current service challenges within the healthcare system in terms of referral routes, waiting times and skill mix

## Podiatry

**Table 4: Top Twenty Research Priorities identified by Podiatry Panel**

Research Priority	Rank	Timeframe
An exploration of the effectiveness of podiatry interventions in reducing amputation rates.	<b>1</b>	Short/Medium
A comparative analysis of podiatric wound care regimes and their effectiveness.	<b>2</b>	Medium
An evaluation of the effectiveness of different offloading techniques in the management of diabetic foot ulcers.	<b>3</b>	Medium
An evaluation of the effectiveness of podiatry vascular assessment in predicting wound healing outcomes.	<b>4</b>	Medium
Does a podiatrist in a renal unit reduce the rate of amputations?	<b>5</b>	Long
An exploration of the competencies and skills required for specialist practice.	<b>6</b>	Long
Research into the effectiveness of footwear for the high risk/at risk foot.	<b>7</b>	Medium
Research into the modalities for healing high risk feet/wounds.	<b>8</b>	Medium
Research to demonstrate the value of biomechanic and orthotic interventions in podiatric diagnosis, treatment and management.	<b>9</b>	Medium
An exploration of the effectiveness of NHS supplied orthopaedic footwear in preventing recurrence of ulceration.	<b>10</b>	Short/Medium /Long
An assessment of the benefits of podiatry interventions in the management of tissue viability.	<b>11</b>	Medium
An evaluation of the effectiveness of dressings used in treating foot ulceration.	<b>12</b>	Short/Medium /Long
An evaluation of the effect of the duration of prescribed antibiotic treatment on wound healing.	<b>13</b>	Medium
Research into the management of Charcot foot.	<b>14</b>	Short
An exploration of the current assessment and diagnostic techniques used in the high risk foot.	<b>15 joint</b>	Long
An evaluation of the effectiveness of sharp debridement in wound care, with regard to different types of foot ulcers.	<b>15 joint</b>	Medium
An exploration of the correlation between swab results and the use of antibiotics.	<b>17</b>	Short/Medium

An assessment of the efficacy of topical negative pressure in wound healing compared to conventional therapy.	<b>18</b>	Medium/Long
An exploration of regional differences in podiatric wound care management in Northern Ireland.	<b>19</b>	Long
Does early intervention in children's foot problems prevent/alleviate problems in later life?	<b>20</b>	Medium/Long

**Recommendation 12:** Research should be conducted to determine the efficacy of assessment and intervention in podiatry clinical practice.

**Recommendation 13:** Research into Podiatry wound care and the high risk foot needs to be undertaken.

**Recommendation 14:** The high risk foot, biomechanics and podopaediatrics are areas of practice that should be researched.

## Occupational Therapy

**Table 5: Top Twenty Research Priorities identified by Occupational Therapy Panel**

Research Priority	Rank	Timeframe
Reviewing the advisory role and representation of the Allied Health Professions at government level in Northern Ireland with particular regard to the management and funding of services and availability of research funding for both academics and clinicians.	<b>1</b>	Short
To research the effects of post-stroke executive dysfunction on occupational performance and personal activities of daily living.	<b>2</b>	Medium
An exploration of the therapeutic contribution Occupational Therapists can make to care and rehabilitation including assistive technology across a range of acute and chronic specialist clinical conditions in hospital and the community.	<b>3</b>	Medium
Does early Occupational Therapy intervention lead to improved physical and functional outcomes in those who have had a stroke?	<b>4</b>	Medium
An exploration of the influence of rehabilitation and discharge assessment strategies based on length of hospital stay and meeting government discharge targets.	<b>5</b>	Short
Research into the impact of Occupational Therapy in elderly rehabilitation.	<b>6</b>	Medium

Effectiveness and cost effectiveness of occupational therapy interventions.	<b>7</b>	Medium
Is activity / number of contacts the most meaningful way to commission Occupational Therapy services?	<b>8</b>	Short
An evaluation of Condition Management Programmes in facilitating return to work strategies.	<b>9</b>	Medium
How effective is splinting in the promotion of maintenance of hand function following stroke/spinal cord injury.	<b>10 joint</b>	Long
An evaluation of the benefits of a home visits with elderly patients compared to only pre and post discharge visits, or no visit at all.	<b>10 joint</b>	Medium/Long
Research into the effectiveness of Occupational Therapy interventions in cardiac rehabilitation.	<b>12</b>	Short
Investigation of the potential for rehabilitation for chronic conditions to lead to a reduction in domiciliary care packages and increase in patient independence and quality of life	<b>13</b>	Short/Medium /Long
The effectiveness of long term rehabilitation services following hospital discharge for those who have had a stroke.	<b>14</b>	Long
An evaluation of the effectiveness of Occupational Therapy interventions in pulmonary rehabilitation. Are the specific assessments recommended by the NICE guidelines being used in practice?	<b>15</b>	Medium
What is the role of Occupational Therapy for children with Aspergers syndrome in education settings?	<b>16</b>	Medium
Do discharge home visits from a rehabilitation unit improve transition to community and client satisfaction?	<b>17 joint</b>	Medium/Long
Evidence to support provision of complex seating in acute medical setting.	<b>17 joint</b>	Short/Medium
Effectiveness of vocational rehabilitation with mental health clients.	<b>19</b>	Medium/Long
An evaluation of the effectiveness of the management of fatigue.	<b>20 joint</b>	Medium
Effectiveness of vocational rehabilitation in brain injury.	<b>20 joint</b>	Long
What are the experiences of carers when taking a loved one home from hospital when they are in the advanced stages of cancer? Do they feel they have the skills to provide the necessary assistance with activities of daily living? Was this need identified and supported at discharge planning?	<b>20 joint</b>	Long

**Recommendation 15:** Identify the therapeutic contribution occupational therapists can make to care and rehabilitation across a range of acute and chronic specialist clinical conditions in hospital and the community.

**Recommendation 16:** Evaluate the effectiveness of occupational therapy interventions and specific therapeutic techniques and strategies associated with a range of conditions including neurological, cardiac and pulmonary.

**Recommendation 17:** Evaluate the effectiveness of occupational therapy commissioning strategies.

**Recommendation 18:** Evaluate the impact of occupational therapy interventions in elderly rehabilitation.

**Recommendation 19:** Identify the role of occupational therapy for children with Aspergers syndrome in educational settings.

**Recommendation 20:** Investigate the therapeutic contribution occupational therapists can make to care and rehabilitation, including assistive technology, across a range of acute and chronic specialist clinical conditions in hospital and the community.

**Recommendation 21:** Investigate the effects of post-stroke executive dysfunction on occupational performance and personal activities of daily living.

**Recommendation 22:** Evaluate the impact of early occupational therapy intervention on the physical and functional outcomes in stroke.

## Speech and Language Therapy

**Table 7: Top Twenty Research Priorities identified by Speech and Language Panel**

Research Priority	Rank	Timeframe
Research to measure the Health Related Quality of Life outcomes of people with speech, language and communication difficulties.	1	Short/Medium
Assessment of the effectiveness of intensive versus non intensive speech and language therapy for a range of conditions.	2	Short
Research designed to demonstrate the impact of therapy on communication outcomes.	3	Medium
An exploration of the role of the Speech and Language Therapist in Dysphagia.	4	Long
Research to assess the effectiveness of therapeutic interventions in the management of:- Dysphonia, Dysphasia, Dysarthria, Dyspraxia, Stammering	5 Joint	Medium
An assessment of the efficacy of Speech and Language Therapy in adult	5 joint	Long

acquired disorders.		
An evaluation of the impact and effectiveness of speech and language therapy on quality of life in people with asphasia.	<b>7</b>	Medium/Long
Working with parents – how important is their involvement in therapy and what level of involvement is most effective for progress in therapy?	<b>8 joint</b>	Short/Long
An investigation into the outcomes of utilising support workers e.g. parents, teachers etc in speech and language therapy treatments.	<b>8 joint</b>	Medium
Effective engagement of teachers in addressing the needs of children with Speech, Language and Communication Needs in mainstream schools.	<b>10</b>	Medium
Research to assess speech and language therapy outcomes in the management of:- Dysphonia, Dysphasia, Dysarthria, Dyspraxia, Stammering	<b>11</b>	Long
An evaluation of the clinical effectiveness of school based therapy models as opposed to traditional clinical intervention.	<b>12</b>	Short/Medium
To investigate the role of the Speech and Language Therapist in Health Promotion / Early Intervention and provision of services.	<b>13 joint</b>	Medium/Long
Research to evaluate the impact of training on the service user.	<b>13 joint</b>	Short/Long
Research designed to demonstrate effective outcomes for a range of different models of therapy provision.	<b>15</b>	Short/Long
Studies to elicit evidence for the identification of Speech and Language Therapy outcomes in rehabilitation following (adult) stroke and brain injury.	<b>16</b>	Medium
Investigation of outcome measures to include qualitative as well as quantitative outcomes.	<b>17</b>	Short
An exploration of meeting education/training needs of carers/family, including communication partners in the implementation of communication therapy within the patients' own environment.	<b>18</b>	Medium
To investigate the effectiveness and efficacy of VitalStim or Neuromuscular stimulation as a treatment for dysphagia including acute stroke patients.	<b>19</b>	Medium
An exploration of the costs and benefits of speech and language therapies.	<b>20</b>	Short/Medium

**Recommendation 23:** Evaluate the evidence base by conducting systematic reviews across Speech and Language Therapy specialisms.

**Recommendation 24:** Further develop a research culture within speech and language therapy.

**Recommendation 25:** Evaluate speech and language therapy interventions to develop the evidence base across all conditions and age groups.

**Recommendation 26:** Development of outcome measures to reflect health related quality of life and to include quantitative and qualitative measures.

## Nutrition and Dietetics

**Table 8: Top Twenty Research Priorities identified by Nutrition and Dietetics Panel**

Research Priority	Rank	Timeframe
A study of the efficacy of oral nutritional support in community settings.	<b>1 joint</b>	Medium
An investigation into the most effective obesity treatment programme for children.	<b>1 joint</b>	Short
A study designed to determine the benefits, including cost effectiveness of the MUST tool when in use within a hospital setting.	<b>3</b>	Medium
An exploration of the effectiveness of the implementation of nutritional screening tools in adult and paediatric wards.	<b>4 joint</b>	Medium
An exploration of strategies for obesity prevention in children and adults.	<b>4 joint</b>	Medium
A study of the impact of the use of dietetic assistants in the changing world of dietetics. Does this show an improvement in outcomes? Which clinical areas does this work best in?	<b>5</b>	Short
An exploration of the extended role of the Dietitian in providing nutrition support.	<b>6</b>	Medium
An exploration of the health economics of nutritional interventions.	<b>6 joint</b>	Short
To explore the most appropriate structured patient education programme for children with type one diabetes.	<b>6 joint</b>	Medium
An investigation of the most effective way to use dietetic services to treat obesity in Type 2 Diabetes Mellitus.	<b>9</b>	Short/Medium
An evaluation of the effectiveness of dietetic treatment in various paediatric	<b>10</b>	Long



conditions, e.g. renal inborn errors of metabolism, cystic fibrosis.		
Investigation of the benefits to the patient and healthcare costs of treating under-nutrition.	<b>11</b>	Short
To research how dietary interventions enhance quality of life outcomes for patients suffering from specified diseases.	<b>12</b>	Long
An assessment of the effectiveness of food fortification training in hospital and community settings.	<b>13 joint</b>	Medium
An exploration of the effectiveness of dietary advice for patients receiving radiotherapy and the effect of outcomes in cancer care.	<b>13 joint</b>	Medium
An exploration of patients and their carer's perspectives of clinical decision making and the provision of information regarding dietary interventions.	<b>13 joint</b>	
An exploration of health and lifestyle including diet and exercise in childhood to determine why public health recommendations are not being achieved. e.g. increased incidence of obesity, poor understanding on the importance of vegetables and fruit.	<b>13 joint</b>	Medium/Long
Research into the identification of malnutrition in childhood.	<b>13 joint</b>	Long
Research to determine how best to engage nursing staff with nutritional screening methods.	<b>18</b>	Short/Long
An exploration of the role of the Dietitian in stemming the tide of obesity in Northern Ireland?	<b>19</b>	Medium
Is all nutritional information provided to patients up to date and evidence based?	<b>20</b>	Medium

**Recommendation 27:** Evaluation studies should be conducted to determine the effectiveness of different nutrition interventions. In particular studies evaluating the effectiveness of nutrition support interventions and interventions designed to tackle the challenge of obesity in adults and children were highlighted as being priorities In Dietetics.

**Recommendation 28:** Research is required to evaluate the health economics and cost effectiveness of nutrition interventions.

**Recommendation 29:** Studies should be undertaken to consider how best to deliver Dietetic services and to explore the extended role of the Dietitian in the management of a number

of chronic conditions. Consideration should also be given to the role of support workers and other health professionals e.g. nursing colleagues in the delivery of dietetic services.

## Orthoptics

**Table 9: Top 18 Research Priorities identified by Orthoptics Panel**

Research Priority	Rank	Timeframe
An exploration of the role of the Orthoptist in the management of stroke/brain injury rehabilitation.	1	Short
Identification of the incidence and type of orthoptic defect among stroke survivors.	2	Short/Medium
An evaluation of current interventions to facilitate the development of an evidence base for orthoptic clinical practice.	3 joint	Short
An exploration designed to address evidence based gaps in clinical therapeutics e.g. amblyopia therapy / nystagmus therapy / timing of surgical intervention.	3 joint	Medium
An exploration of the most effective way to use atropine in amblyopia therapy.	3 joint	Medium
An evaluation of the cost effectiveness of treatments and specialist orthoptic services.	6	Short/Medium
Research to improve clinical tests used in orthoptics leading to more accurate testing e.g. Snellen Logmar.	7 joint	Medium
An assessment of the role of the Orthoptist in special needs vision screening.	7 joint	Short
An exploration of new ways of working designed to consider the relevance of concepts of multidisciplinary approaches, shared care and extended roles for Orthoptists.	9	Medium
An exploration of factors influencing recruitment into orthoptics.	10	Medium
What is the best type of surgery for true convergence excess squints?	11 joint	Long
Research into possible geographical and genetic links in the incidence of	11 joint	Medium

eye disease e.g. squint.		
Research to improve information for parents/users.	<b>13</b>	Long
Epidemiological study to elicit information on the prevalence and incidence of orthoptic and related conditions.	<b>14</b>	Long
An evaluation of the impact of supervision on day to day working practices.	<b>15</b>	Medium
A comparative study contrasting the effectiveness of early surgery on a 'recent' onset squint depending on history from parents, with delayed intervention until binocular functions can be improved?	<b>16</b>	Medium
Research to improve approaches to clinical investigation of e.g. vision assessment / amblyopia / efficacy of vision screening.	<b>17</b>	Medium/Long
Experimental research to investigate orthoptic approaches to investigation, management and mechanisms, and to develop theory.	<b>18</b>	Long

**Recommendation 30:** Epidemiological research should be carried out into the incidence and type of orthoptic defect among stroke survivors.

**Recommendation 31:** Epidemiological research should be carried out into the geographical and genetic links in the incidence of eye disease.

**Recommendation 32:** Epidemiological study to elicit information on the prevalence and incidence of orthoptic and related conditions.

**Table 10: Top Twenty Research Priorities identified by Key Stakeholders Panel**

<b>Research Priority</b>	<b>Rank</b>	<b>Timeframe</b>
Comparative study of the funding allocated for medical and nursing research with that allocated to the Allied Health Professions.	<b>1</b>	Short
Is further research needed into the range of services needed to support the elderly?	<b>2</b>	Medium
Research designed to inform improvement of multi-professional care pathways including maximising the contribution of Allied Health Professionals.	<b>3</b>	Short

Research to identify user perceptions of Allied Health Professionals and user participation in service development, including delivery of care to the chronically ill.	<b>4</b>	Short/Long
Research concerned with developing a process to tackle local health inequalities.	<b>5</b>	Long
A study designed to explore factors that influence the image/standing of Allied Health Professionals in the community and with peers.	<b>6 joint</b>	Medium
How do therapists assess health literacy and how does health literacy impact on the effectiveness of interventions?	<b>6 joint</b>	Medium
To research the effectiveness of a generic assistant compared to a profession specific assistant?	<b>6 joint</b>	Short/Medium
Research into the cost effectiveness of research studies of therapy interventions.	<b>9 joint</b>	Short/Medium
Is there scope to enhance workforce productivity through greater skill-mix?	<b>9 joint</b>	Medium
An exploration of the role of the Allied Health Professional therapist in the management of mental health.	<b>11</b>	Long
Exploration of an integrated approach to tackling obesity.	<b>12 joint</b>	Short
Is there scope to develop regional specialist teams for Mental Health and Learning Disability clients?	<b>12 joint</b>	Long
Is there need for regional provision of disease-specialist therapy teams?	<b>14</b>	Long
An evaluation of the Condition Management Programme in relation to outcomes.	<b>15 joint</b>	Medium
Research into equality of access to services including the barriers users identify in relation to accessing services.	<b>15 joint</b>	Medium
Research into the expanded role of Allied Health Professionals i.e. tasks previously undertaken by other professional staff and whether this leads to improved outcomes, efficiency etc	<b>17</b>	Short/Medium
Exploration of the effectiveness of interventions in the treatment of specific conditions such as obesity and diabetes.	<b>18</b>	Short/Long
What involvement by Allied Health Professionals is most productive and	<b>19</b>	Short

cost effective and makes best use of their scarce and valuable time?		
Research to identify and explore the experience of patients/clients to various treatments.	<b>20</b>	Short/Long

**Table 11: Service Top Twenty Research Priorities Identified by Service User Panel**

<b>Research priority</b>	<b>Rank</b>	<b>Timeframe</b>
An investigation of how to reduce the time between referral and consultation.	<b>1</b>	Short
Research into why the lead time is so long.	<b>2</b>	Short
An investigation into the importance of early diagnosis/detection of any issues associated with allied health professional therapies	<b>3</b>	Short
Research into causative factors associated with suicide, including warning signs and prevention strategies.	<b>4</b>	Short
Research into the effectiveness and efficiency of an allied health professional triage service at the point of diagnosis and at the point of relapse.	<b>5</b>	Short/Medium
Research into the effectiveness of cross functional therapy approaches as opposed to a single source of intervention.	<b>6</b>	Short/Medium
Research into how to provide allied health professional support in rural areas	<b>7 joint</b>	Short/Medium
Research into mental illness in children.	<b>7 joint</b>	Short
A cost benefits analysis for early versus late intervention of allied health professional services.	<b>9 joint</b>	Short/Medium
Research into self-harm with regards to young people.	<b>9 joint</b>	Short
An exploration of causative factors associated with obsessive compulsive disorder including the role of trauma.	<b>9 joint</b>	Short
Is there adequate and appropriate information available for parents to enable them to support their child's progress when in receipt of allied health professional services?	<b>9 joint</b>	Short
Research into whether all information and viewpoints are shared with parents to enable them to make informed decisions about care for their child when subject	<b>9 joint</b>	Short

to allied health professional services.		
Research into the most effective use of time by allied health professionals in delivering services.	<b>14</b>	Short
Research into the frequency of sessions with therapies professionals – are they insufficient?	<b>15 joint</b>	Short/Medium
An exploration of resource availability for allied health therapies and strategies designed to maximise the effective use of available resources.	<b>15 joint</b>	Short
Is quality and quantitative support provided to children and their parents during the provision of allied health professional service?	<b>15 joint</b>	Short
Research into location versus load factor for all allied health professionals	<b>18</b>	Short
Research into mechanisms to deal with unresponsive clients – should sessions be ended and should there be a system of early return follow up appointments for such situations?	<b>19</b>	Medium
An exploration of how to make allied health professional service relevant in a modern health care environment.	<b>20</b>	Medium

## Conclusion

A number of reports have identified the importance of the contribution of the therapy professions in addressing the policy imperatives in healthcare planning, organisation and delivery within NI, and the UK as a whole. This has taken place during periods of significant change over time which resulted in: the transition of services from acute hospitals to community and home care; the importance of focusing on health promotion and disease prevention; the health impact of lifestyle habits; the need to embrace new technologies in healthcare and treatment; the involvement of service users as partners in the research, planning and delivery of services; the need for integrated and streamlined services; and the reduction of health and social inequalities, and improvement of access for all to appropriate health care. However, making a meaningful contribution to an agenda of such scale and complexity requires the therapy professions to develop a body of knowledge and skills that relates directly to the treatment and interventions that form the basis of their contribution to care and health services in order to maintain and develop high quality patient/client care. This needs to be based on the highest quality research.

This study provides policy makers, health strategists, research funders and therapy professionals with an important road map regarding those clinical and professional issues, which need to be addressed by research as a matter of priority. However, it should be acknowledged that research of this nature can be time limited, since as healthcare develops so too will the research topics that become a priority. The findings of the report need therefore to be disseminated widely within the professions, institutions and services affected in order to maximise its potential in advancing meaningful research, and contributing to the development and maintenance of high quality healthcare. The study is also important as it is the first study of its kind that sought to identify research priorities for six different therapy professions in NI and involved service users, managers and policy makers in the process.

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## Appendix 1: Summary of Priority Areas

	Practice evaluation	Health promotion	Service organisation	Clinical academic training	Service-user perspective	Cost-effectiveness	Epidemiology	Other	Areas of practice	Techniques/interventions	Service Organisation
<b>PT</b>	1,2,3 joint, 5,8,12, 13joint 13 joint 16 joint 16 joint, 20 joint, 20 joint	11	3,6,9, 13 joint, 16 joint	7		6			Chronic pain, low back pain, chronic long terms conditions, cancer, lymphodema, soft tissue injury, depression.	Exercise prescription, exercise adherence, acupuncture, education, hypnosis, bio-psychosocial approaches, group vs single, self management.	Relationship between pressure of targets, waiting lists and repeat referrals on patient centred outcomes; optimal duration and intensity of treatment/engagement and links to outcome; skill mix; development of the structure for new service approaches;
<b>POD</b>	1, 2, 3, 4, 5, 7, 8,9, 10 11, 12, 13, 14, 15 joint 17, 18, 20		19	6					Ulceration, high risk foot, Charcot foot, Biomechanics, Podopaediatrics	Offloading in the diabetic foot, vascular assessment, footwear, Biomechanics and orthoses, Orthopaedic footwear, Wound dressings, Antibiotic therapy, Assessment and diagnostic techniques used in the High risk foot, topical negative pressure in wound healing versus conventional therapy.	Regional differences in wound care management



	Practice evaluation	Health promotion	Service organisation	Clinical academic training	Service-user perspective	Cost-effectiveness	Epidemiology	Other	Areas of practice	Techniques/interventions	Service Organisation
<b>OT</b>	2, 3, 4, 6, 9, 10 joint 12, 13, 14, 15, 19, 20 joint 20 joint		1, 5, 8, 10 joint 16, 17 joint 20 joint			7			Vocational rehabilitation, stroke, cardiac and pulmonary and brain injury rehabilitation, management of fatigue, spinal cord injury, Aspergers syndrome, fatigue,	Splinting, complex seating, vocational rehabilitation techniques, assistive technology, Condition Management Programmes, return to work strategies,	Representation of AHPs at government level; management and funding of services and research; rehabilitation and discharge assessment strategies; government discharge targets; discharge planning; commissioning occupational therapy services; benefits of home visits; role of occupational therapy for children in education settings; identification and support of experiences and skills of carers
<b>SLT</b>	1 2, 3, 5 joint 7, 8,joint 11, 12, 13 joint 15, 16, 17 19,	8 joint 10, 18	4, 13, 20						Dysphagia, Dysphonia, Dysphasia, Dysarthria, Dyspraxia, Stammering, Adult acquired, Stroke Brain injury Children with speech, language and communication needs	Intensive vs non intensive, School based therapy models, Traditional clinical intervention, Vital stim, Neuromuscular stimulation, Educating and training significant others	Intensive versus non intensive therapy, exploration of the role of SLT, using support workers, school based therapy models compared to traditional clinical intervention, cost and benefits of SLT
<b>N&amp;D</b>	1joint, 1 joint, 3, 4 joint 6 joint 10,12, 13 join, 13 joint, 13 joint, 20	4 joint 13joint	5,6 joint, 9,19, 18		13 joint	6 joint 11			Nutrition support, Dietary / management / treatment of chronic diseases (obesity, diabetes, cancer), health promotion.	Nutrition interventions, malnutrition screening tools, structured patient education.	Role of Dietetic Assistants; engaging nursing staff in nutritional screening; most effective use of Dietetic services to treat Obesity; The extended role of the Dietitian in Nutrition Support; role of Dietitian in Obesity prevention

	Practice evaluation	Health promotion	Service organisation	Clinical academic training	Service-user perspective	Cost-effectiveness	Epidemiology	Other	Areas of practice	Techniques/interventions	Service Organisation
<b>ORP</b>	1, 3 joint 3 joint, 3 joint, 11 joint, 16		6, 7 joint 9,10,13, 15				2, 11 joint 14		Stroke, brain injury, squints,	Amblyopia treatment, nystagmus treatment, surgery,	Role of orthoptist in vision screening; MDT approaches, shared care and extended roles; impact of supervision on working practices;
<b>KS</b>	6 joint, 12 joint 15 joint 15 joint 20	5	2,3,4, 6 joint 9 joint, 9 joint, 11 12 joint 14,17	1	1 5 joint 20	19			Elderly, chronic illness, obesity, mental health and learning disability, diabetes	Condition management programme, health literacy	Design of multidisciplinary care pathways to maximise AHP input; skill mix and productivity/expanded role of AHPs; local health inequalities and access to services; generic assistances versus profession specific; development of regional disease/condition specialists teams;
<b>SU</b>	3		1,2,5,6, 7 joint, 9 joint 14 15 joint 15 joint, 15 joint, 18,19,20					Mental health 4 7 join 9 joint	Mental health, suicide, self harm, OCD,	Triage service, education of carers/parents	Reduce waiting time between referral and consultation; early diagnosis/detection; effectiveness of triage services/cross discipline working; rural access to AHPs and location vs load factors/; effective/sufficient use of AHP time and resources and relevance to modern NHS; Follow up services for unresponsive clients.

Key: AHP = Allied Health Profession; MDT = Multidisciplinary Team; N&D = nutrition and dietetics; NHS = National Health Service; OCD = Obsessive Compulsive Disorder; ORP = orthoptics; PT = physiotherapy; POD = podiatry; OT = occupational therapy; SLT = speech and language therapy; KS = key stakeholders; SU = service user

